

INDUSTRIAL TECHNOLOGY GRAPHIC COMMUNICATIONS

RELATED ACADEMIC SKILLS: WHAT THE VOCATIONAL INSTRUCTION SHOULD REINFORCE:

	ACADEMIC AREA	INSTRUCTIONAL LINKS
OCCUPATIONAL COMPETENCIES:		
1. Comply with shop and equipment safety rules (OSHA & Right to Know).	Language Arts	Comprehends/information oral-written/rationale
	Free Enterprise	Describes/explains/government impact/costs/regulations
	Science	Applies/uses/laboratory techniques/safety
2. Clean and maintain work area and leave in safe condition.	Language Arts	Comprehends/information oral-written/rationale
3. Report problems to supervisor.	Language Arts	Presents/informal speech/information supplying
4. Determine basic maintenance procedures of equipment using manuals.	Language Arts	Uses/text resources/operating manual
5. Read and interpret specifications on job ticket.	Language Arts	Comprehends/information-written/purpose
6. Explain and demonstrate the components in design of a layout to include color theory, art type, size and balance.	Language Arts	Comprehends/information-written/purpose
	Science	Applies/uses/laboratory instruments-techniques
7. Explain and demonstrate the components in preparing camera ready art for a layout to include photo, copy, sizing, trim marks, overlays and basic impositions. Comprehends/information-written/purpose	Language Arts	
	Science	Applies/uses/laboratory instruments-techniques
8. Exhibit basic PC computer literacy.	Science	Uses/computers/basic literacy
9. Use appropriate keyboarding techniques.	Science	Uses/computers/keyboarding
10. Enter layout specifications on typesetting or copy.	Science	Uses/computers/layout specifications desktop publishing equipment and produce final
11. Use proofreading techniques successfully.	Language Arts	Edits/forms/documents
12. Compute measurements using decimals, fractions, metric, and printer's measurement	Math	Converts/units/metric-English

in all areas of graphic communications.

	Math	Converts/decimals/fractions
13. Read job orders to determine printing specifications.	Language Arts	Comprehends/information-written/purpose
14. Run a one-color job on off-set duplicator.	Science	Applies/uses/laboratory instruments-techniques
15. Run a two-color job on off-set duplicator.	Science	Applies/uses/laboratory instruments-techniques
16. Inspect quality of copy while running job.		
17. Perform clean up operations on a press.	Language Arts	Comprehends/information oral-written/rationale
18. Explain various printing processes (e.g., screen, flexography, gravure, letterpress, web and ink jet).	Language Arts	Comprehends/information-written/rationale
19. Explain off-set lithography process.	Language Arts	Comprehends/information-written/rationale
20. Evaluate components required of printing process (e.g., paper, ink, fountain solution and screens).	Language Arts	Comprehends/information-written/rationale
	Language Arts	Evaluates/information-written/appropriateness
21. Explain different camera techniques used in the reproduction process (e.g., film types, filters, lenses, aperture, exposure, sizing, gray scale and lighting).	Language Arts	Comprehends/information oral-written/rationale
22. Explain and demonstrate different photographic techniques such as duotones, positives, negatives, special effects and proofing materials.	Language Arts	Comprehends/information-written/rationale
	Science	Applies/uses/laboratory instruments-techniques
23. Operate a 35 mm camera and explain different camera techniques used in photography (e.g., film types, filters, lenses, subjects, lighting, exposure and aperture).	Language Arts	Comprehends/information-written/main idea
	Science	Applies/uses/laboratory instruments-techniques
24. Develop black/white film and make a final print.	Science	Applies/uses/laboratory instruments-techniques
25. Explain basic scientific concepts involved in the photographic process.	Science	Identifies/definitions/operational
	Language Arts	Applies/uses/definitions

26. Read job order to determine photographic information.	Language Arts	Comprehends/information written/main idea
27. Produce line, halftone and duotone negatives and PMT materials successfully.	Science	Applies/uses/laboratory instruments-techniques
	Math	Calculates/evaluates/percent
28. Clean and maintain darkroom and equipment.	Language Arts	Comprehends/information oral-written/rationale
	Language Arts	Attends/directions/tasks
29. Read job specifications for film assembly.	Language Arts	Uses/text resources/specifications
	Language Arts	Comprehends/information-written/purpose
30. Assemble film for a one-color job.	Science	Applies/uses/laboratory instruments-techniques
	Math	Measures/direct
31. Assemble film for a two-color job including duotone.	Science	Applies/uses/laboratory instruments-techniques
	Math	Measures/direct
32. Explain and demonstrate the different film assembly techniques such as cutting, masks, inserting halftones, screen tints, reverses, overprints, labeling flats, ruling, opaquing, trim and register marks and basic impositions	Science	Applies/uses/laboratory instruments-techniques
	Math	Measures/direct
	Language Arts	Comprehends/information-written/comparisons/contrasts
33. Expose and process printing plates.	Science	Applies/uses/laboratory instruments-techniques
34. Explain and demonstrate the different techniques for exposing and processing printing plates.	Language Arts	Identifies/information-written/main idea
	Language Arts	Evaluates/information-written/relationship of ideas
	Science	Applies/uses/laboratory instruments-techniques
35. Identify bindery and finishing equipment and the functions of each.	Language Arts	Identifies/information-written/main idea
	Language Arts	Comprehends/information-written/rationale
36. Explain and demonstrate the use of a cutter, folds (to include perforating and scoring), numbering machine, stitcher, paper drill and binding equipment.	Science	Applies/uses/laboratory instruments- techniques
	Language Arts	Identifies/information-written/main idea

	Language Arts	Evaluates/information-written/ relationship of ideas
37. Identify career opportunities involved in graphic communications.	Free Enterprise	Identifies/job opportunities/ emerging fields
38. Describe new technological developments.	Science	Analyzes/evaluates/science technology
	Free Enterprise	Identifies/job opportunities
39. Identify the impact on society and environment.	Science	Analyzes/environmental issues/ impact
	Free Enterprise	Describes/explains/economic interdependence
40. Define industrial technology terms associated with graphic communications.	Science	Identifies/definitions/operational
	Language Arts	Applies/uses/definitions

LEADERSHIP COMPETENCIES:

1. Follow directions.	Language Arts	Comprehends/information oral- written
	Language Arts	Attends/directions/tasks
2. Speak efficiently in front of others.	Language Arts	Presents/informal speech/ discussion
	Language Arts	Evaluates/information-oral
3. Utilize time effectively.	Language Arts	Applies/uses/study habits/methods
	Free Enterprise	Identifies/cost factors/human resources
4. Prioritize a series of tasks.	Language Arts	Composes/edits/draft oral-written/ sequence
5. Set goals.	Language Arts	Describes/purpose/strategy
6. Work effectively with others.	Language Arts	Adapts/style
7. Listen effectively.	Language Arts	Adapts/strategy/listening
8. Facilitate group interaction.		
9. Adapt to environment/situation.	Language Arts	Adapts/style

JOB GETTING, JOB KEEPING COMPETENCIES

1. Identify requirements for a job.	Language Arts	Identifies/information-written/ main idea
2. Complete required forms.	Language Arts	Composes/edits/forms/documents

3. Write a letter of application.	Language Arts	Composes/letters/business
4. Evaluate a job offer.	Language Arts	Evaluates/information-written/ appropriateness
5. Interact with others in a courteous and tactful manner.	Language Arts	Adapts/diction/audience-purpose- situation
6. Organize thoughts and clearly expresses point of view, both orally and in writing.	Language Arts	Adapts/strategy/speaking-writing
7. Exhibit dependability and punctuality.		
8. Ask for help when needed.		
9. Accept new challenges.		
10. Accept supervision willingly.	Language Arts	Attends/directions/tasks
11. Adapt to change/demonstrates flexibility.		
12. Manage time effectively.	Language Arts	Applies/uses/study habits/methods
13. Follow rules and regulations.	Language Arts	Comprehends/information-written/ rationale
	Language Arts	Attends/directions/tasks
14. Produce acceptable levels of work.		
15. Work within guidelines.	Language Arts	Comprehends/information-written/ rationale
	Language Arts	Attends/directions/tasks
16. Take responsibility for mistakes and/or good work.		
17. Comply with safety and health rules.	Language Arts	Comprehends/information-written/ rationale
18. Utilize equipment correctly.	Science	Applies/uses/laboratory instruments-techniques/safety
	Free Enterprise	Describes/explains/government impact/costs/regulations
19. Maintain clean and orderly work area.	Science	Applies/uses/laboratory instruments-techniques/safety
	Free Enterprise	Describes/explains/government impact/costs/regulations
20. Demonstrate personal hygiene and cleanliness.		
21. Explain the concept of competition.	Free Enterprise	Defines/economic terms/ competition
	Free Enterprise	Describes/explains/economic

		concepts
22. Analyze the concept of supply and demand	Free Enterprise	Describes/economic concepts/ supply-demand
	Free Enterprise	Describes/explains/economic concepts
	Language Arts	Evaluates/information-written/ relationship of ideas
23. Explain the concept of profit.	Free Enterprise	Defines/economic terms/profit
	Free Enterprise	Describes/explains/economic concepts

ENTREPRENEURSHIP COMPETENCIES:

1. Analyze business organizations.	Language Arts	Evaluates/information-written/ relationship of ideas
	Free Enterprise	Describes/explains/economic concepts
2. Identify skills required of a business owner.	Language Arts	Identifies/information oral-written/ main idea
	Free Enterprise	Describes/explains/economic concepts
3. Recognize relevant, ethical issues in business	Language Arts	Comprehends/information written- oral
	Free Enterprise	Describes/explains/economic concepts
4. Identify the personal characteristics of	Language Arts	Identifies/information oral- written/main entrepreneurs idea
	Free Enterprise	Defines/economic terms/ entrepreneur
5. Analyze the contents of a business plan.	Language Arts	Evaluates/information-written/ appropriateness
6. Recognize the importance of technical assistance.	Language Arts	Comprehends/information written- oral/main idea
7. Explain types of business ownership	Language Arts	Comprehends/information written- oral/main idea
	Free Enterprise	Describes/explains/economic concepts
8. Identify factors in obtaining finances for a new	Free Enterprise	Describes/explains/financing business.